

ABSTRACT OF THE DISCLOSURE

Optical routers or optical interconnection devices that include an optical coupling method and optical coupling apparatus wherein a plurality of layers that contain optical devices that require optical coupling can be optically coupled by inserting optical coupling elements

5 therein to transfer a light signal from one location on one layer to another location on a different layer. The optical coupling elements can include various light directing members such as reflectors, beam splitters/combiners or other components that can act on a light signal to modify, or control the light signal in a desired manner. In addition, an optical coupling elements can be transparent to the light signal so as not affect the direction or the

10 integrity of the light signal as it passes through the optical coupling element.